

PATENT CLAIMS

1. An actuator (10), having sensors (12) for detecting measurement variables which represent the operating state and an evaluation unit (16) which is associated with the actuator (10), with the evaluation unit (16) being connected to at least one from amongst the multitude of sensors (12) and actuating elements (13) via a first data bus (15).
2. The actuator (10) as claimed in claim 1, characterized in that the evaluation unit is connected to a controller (19), which controls operation at least of the actuator (10), via a second data bus (18).
3. The actuator (10) as claimed in claim 1 or 2, characterized in that both sensors (12) and actuating elements (13), which are arranged in the actuator (10), are connected to the evaluation unit (16) by means of the first data bus (15).
4. The actuator (10) as claimed in one of claims 1 to 3, characterized in that sensors (12) and/or actuating elements (13) contain data which can be read out by the evaluation unit (16) and includes at least identification data (22) and operating parameter data (21).
5. The actuator (10) as claimed in one of the preceding claims, characterized in that the actuator (10) is an electric motor (11), such as an actuating drive, in particular a linear drive, and, as the actuating element (13), has at least one return blocking means which blocks a rotary movement of the electric motor (11) in the driveless state.

6. The actuator (10) as claimed in one of the preceding claims, characterized in that the evaluation unit (16) is arranged in the housing (20) of the actuator (10), with a plug connection for connecting the evaluation unit (16) to the controller (19) via a second data bus (18), in particular by means of a cable, being provided preferably on the outside of the housing.
7. A method for operating an actuator (10) having an evaluation unit (16) and having at least one element from amongst the multitude of sensors (12) and actuating elements (13) which is connected to the evaluation unit (16) via a first data bus (15), with sensors (12) and actuating elements transmitting data, which in particular represents the operating state of the actuator (10), to the evaluation unit.
8. The method as claimed in claim 7, characterized in that both sensors (12) and actuating elements (13) are connected to the evaluation unit (16) by means of the first data bus (15), it being possible for the evaluation unit (16) to control the actuating elements (13) via the data bus.
9. The method as claimed in either of claims 7 and 8, characterized in that the evaluation unit (16) transmits the data to a controller (19) via a second data bus (18).
10. The method as claimed in one of claims 7 to 9, characterized in that identification data (22) which enables identification is transmitted by the elements from amongst the multitude of sensors (12) and actuating elements (13) which are connected to the evaluation unit (16).
11. The method as claimed in one of claims 7 to 10, characterized in that operating parameter data (21), which includes operating parameters of the sensor and/or of the actuating element, is transmitted by the elements from

amongst the multitude of sensors (12) and actuating elements (13) which are connected to the evaluation unit (16).

12. The method as claimed in claim 11, characterized in that operating parameter data (21) is transmitted to the evaluation unit (16) by sensors (12) and/or actuating elements (13) at least when it has been established on the basis of identification data (22) that the sensor (12) or the actuating element (13) was not previously registered in the evaluation unit (16).
13. The method as claimed in one of claims 7 to 12, characterized in that the data is processed in the evaluation unit (16) as a function of operating parameter data (21) which has been transmitted to the evaluation unit (16) by sensors (12) and actuating elements (13).
14. The method as claimed in one of claims 7 to 13, characterized in that the evaluation unit (16) transmits the data received from the sensors (12) and actuating elements (13) to the controller (19), with the data having been previously processed at least partially in the evaluation unit (16).